COMMENTS BY THE LOUISVILLE CHEMISTRY PARTNERSHIP, INC. ON THE JANUARY 12, 2005 FORMAL PROPOSAL OF A REVISED AIR TOXICS REGULATORY PROGRAM BY THE LOUISVILLE METRO AIR POLLUTION CONTROL BOARD

(SUBMITTED FEBRUARY 14, 2005)

INTRODUCTION

The Louisville Chemistry Partnership, Inc. ("LCP" or the "Partnership") appreciates this opportunity to submit comments on the following proposed regulations, collectively referred to as the STAR Proposal: Regulations 1.02, 1.06, 1.07, 1.20, 1.21, 2.02, 2.08, 3.01, 5.01, 5.11, 5.12, 5.20, 5.21, 5.22, 5.23, and 5.30. The Louisville Metro Air Pollution Control Board voted to initiate the formal rulemaking process with respect to these regulations at its January 12, 2005 meeting. According to the information provided by the District staff, a 30-day public comment period extends through February 14, 2005 and a public hearing will be held on February 16, 2005.

The Partnership's member companies support the goal of the STAR program – to reduce the exposure of individuals to toxic chemicals at levels that may pose an unreasonable risk to human health. To achieve that goal, environmental regulations should be developed that are necessary to protect the public health, consider cost-benefit and feasibility, and are based on sound science. As proposed, the STAR program does not meet these criteria, which should form the basis of any regulatory program. For this reason, the following comments are offered.

These comments are organized as follows: (1) general comments that apply to multiple aspects of the STAR Proposal grouped by area of concern; (2) comments that are addressed to specific proposed regulatory provisions, and (3) comments on the District's Preliminary Regulatory Impact Analysis ("PRIA").

I. GENERAL COMMENTS

A. STAR IMPROPERLY FOCUSES ON STATIONARY SOURCES

1. The Partnership's members have made significant progress over the last ten years in reducing emissions of hazardous air pollutants ("HAP"). Additional reductions have been made in response to the District's call for industry to reduce emissions in an effort to bring Jefferson County into attainment with ozone standards. Despite these reductions, the District continues to focus its regulatory efforts on single stationary sources while postponing action on recognized significant contributions by area and mobile sources.

2. The District has drawn erroneous conclusions from the EPA Region 4 study cited as a basis for the STAR Proposal. The

Kentucky Division for Air Quality ("DAQ") reviewed and assessed the data presented in the EPA Region 4 study and reached different conclusions based upon the weighting of factors other than emissions. Some of the preliminary assessments from the review, as reported to the State Air Toxics Workgroup include the following:

- Historic toxic air pollutant monitoring data in Kentucky reflects levels that exceed presumed target risk screening levels (1×10^{-6}) in all areas of Kentucky, whether urban or rural, industrial or agricultural.

- Monitoring in rural and urban areas indicate risk above the presumed target risk screening level both in areas of industrial activity and in areas where little or no industrial activity has occurred.

- When compared with average risk for other cities in EPA Region 4 in the United States, the upper-bound average risks for Kentucky urban areas are similar to those for other cities.

The detailed information which further supports these points is contained in the December 2, 2004 report entitled "Data From Historical Studies In Screening Risk Assessment For Air Toxics," presented to the Commonwealth of Kentucky Toxic Air Pollutant Workgroup (Rev. January 26, 2005. Copy attached at Tab 1).

Additionally, the 1996 EPA National Air Toxics Assessment **(http://www.epa.gov/ttn/atw/nata/natsa1.html)** indicated that, on a national average, approximately 90% of the airborne risk borne by Americans does not originate at the facilities that are targeted by this proposed rulemaking. The predominant source of risk is the on-road and off-road mobile source categories, such as cars, trucks, construction equipment, and marine traffic. The District has not adequately considered those impacts in assessing the controls to be imposed by the STAR program. As a result, the District's chosen regulatory approach over-controls stationary sources and fails to control those sources with a greater impact.

3. The STAR Proposal was developed based upon inadequate analysis and understanding of the county monitoring data. Anomalies that have been noted in the monitoring data were not adequately assessed. For example, elevated levels of certain toxic constituents were found in non-industrial areas, such as Otter Creek. The District's proposed regulatory program fails to address those issues. Further, the STAR program fails to assess or address

the impact on the County's air from sources outside Jefferson County.

4. It is clearly improper to place the burden of reducing air toxics resulting from transport and mobile sources upon the shoulders of the local manufacturing community. These regulations focus on industrial source emissions only. Proposed Regulation 5.30 does not adequately ensure that area and mobile sources of toxic air contaminant emissions will be addressed. The expectation that the regulations have established is that these new requirements will make a significant impact on community risk. In fact, these regulations may reasonably be expected to have only limited impact on community risk. By exempting or ignoring many sources of risk, the draft regulations would impose unduly harsh requirements on industrial sources, while at the same time, continuing to expose residents to elevated health risks.

B. STAR DOES NOT ADEQUATELY CONSIDER AND APPROPRIATELY COMPLEMENT FEDERAL AND STATE EFFORTS

1. Many sources in Jefferson County, including some of the Partnership's members, are currently major sources of HAP, as defined in Section 112(b) of the Clean Air Act. These major sources of HAPs are subject to EPA's Maximum Achievable Control Technology (MACT) program. Sources in the MACT program are further subject to the residual risk standards of Section 112(f) of the Clean Air Act. The residual risk standards are designed to accomplish the same goals as STAR — the assurance of an ample margin of safety (AMOS) for citizens residing near major sources of HAPs. EPA is currently performing extensive evaluations for residual risk rules that will impact facilities within Jefferson County. For example, EPA has stated that residual risk rulemakings will occur in 2005 and 2006 for coke ovens, dry cleaning, HON, and halogenated solvents. (EPA Presentation, Ky Air Toxic Air Pollutant Workgroup, Jan. 26, 2005)

   Although the District has specifically stated that residual risk MACT development for the Polymers & Resins categories is dead, discussions by Partnership members with EPA and consultants elicited contrary information. This effort is only temporarily delayed as funds and efforts are being directed to MACTs with court-imposed deadlines. It is reasonable to assume that work will be continuing soon on the Polymers & Resins MACT. In summary, the proposed STAR regulation package does not address conformity issues between the two programs with the same goal. Any source subject to any Section 112(f) standard should be

exempt from the STAR program, or should be designated as in compliance with STAR.

EPA also requires MACT facilities to comply with startup, shutdown, and malfunction (SSM) plans for most process units regulated by the MACT program. The proposed STAR regulations are not harmonized to ensure consistency between the District and EPA SSM requirements for MACT units. The District should develop consistent SSM regulations to ensure seamless compliance or exempt processes already subject to an SSM plan under a MACT standard.

2. Under Kentucky Law, the District is required to ensure that air pollution regulations within Jefferson County are at least as stringent as those regulations governing the remainder of the Commonwealth. The District must submit prepared regulations and standards to DAQ for prior concurrence, and the District has not yet complied with that statutory obligation. DAQ is currently in the process of developing a new state air toxics program. Once the DAQ air toxics rules that will likely emerge from this effort are finalized, the District is required to review the new regulations and ensure that the District's regulations are at least as stringent as the DAQ regulations that apply to the remainder of Kentucky. The District should work with the state on a consistent approach to the air toxics issue. By moving forward prematurely, the District takes the risk of forcing Jefferson County to become subject to a program that may very likely be required to change immediately before, or shortly after, the compliance date. Multiple rulemaking is an undue burden on Jefferson County's regulated industries, and the District should ensure that STAR implementation would not be complicated by DAQ/EPA requirements that could require substantive changes mid-stream.

   Additionally, the District at different points in the regulatory package, particularly the Preliminary Regulatory Impact Assessment ("PRIA"), states that DAQ has "begun implementing a risk-based review within the construction permit process, establishing a standard of 1 x 10^{-6} increased risk of cancer as meeting the provision of 401 KAR 63:020. *See, e.g.,* PRIA, at 2. First, the state regulations provide for an integrated construction and operating permit program so there is not a separate construction permit program. Second, in order for such a "standard" to be established, DAQ must have completed rulemaking in accordance with KRS Chapter 13A and that has not occurred. Pursuant to KRS 13A.130, DAQ cannot regulate by unpromulgated guidance. The District's mischaracterization of the DAQ regulatory position is particularly disturbing given the

specific statement by DEP Commissioner Cress at the last Toxic Workgroup meeting that the purpose of the upcoming March 3, 2005 meeting would be to discuss an appropriate state air toxic goal. Moreover, the December 2, 2004 report to the Workgroup as revised January 25, 2005, specifically refers to the 1 x 10^{-6} level as a screening tool and an inappropriate single criterion for regulatory purposes. See Attachment 1, Introduction, at 1.

C. STAR SHOULD FOCUS ON THE IDENTIFIED CHEMICALS OF CONCERN

1. The scope of the proposed STAR Program greatly exceeds what is necessary to address the toxics identified in the West Jefferson County Risk Assessment. As one example, the District has re-written Regulation 1.07 related to excess emissions during startup, shutdowns and malfunctions and created a new Regulation 1.20, regarding implementation of malfunction prevention programs. These two regulations have applicability to every permitted facility in Jefferson County. Perhaps even more significantly, the data showed only 18 toxic pollutants at issue for Jefferson County. However, the regulatory program reaches well beyond those 18. The economic burden on solely complying with the evaluation, assessment and paperwork requirements of these over-reaching proposals is enormous. An adequate basis for the additional reach of the program has not been established.

2. The District has taken an extremely draconian approach to addressing air toxics issues in the Louisville area, and has only focused on a small segment of the air toxic sources. The draft regulations propose a highly conservative methodology for assessing environmental acceptability, include an inordinately long list of compounds instead of focusing on top tier compounds, and regulates each point source on both an individual chemical and an aggregate basis. To launch such a program holistically may overextend both regulatory and industry resources. As an alternative to the proposed approach, the District should adopt a phased or tiered approach that would establish manageable goals over a more reasonable time period and adopt regulations that serve those goals. The first tier should focus on a short list of the compounds from the ambient monitoring study (Catergory 1) that were shown to be major contributors to community risk levels. Second phase should focus on any additional chemicals that present a known risk. After two phases have been completed, a study to assess "residual risk" remaining should be conducted to determine the need for additional regulation. The third phase would address remaining risk and compounds associated with it.

3. The Partnership's members make significant economic contributions to Jefferson County and the surrounding communities. The program will threaten the economic development of Jefferson County. The District has not shown that the regulations will in fact reduce the levels of air toxics in any appreciable amount. The regulations are not based on sound science, are overly conservative and fail to take into account technical and economic feasibility. Loss of employment can create as many ills as the District hopes to prevent as a result of the ensuing lost wages, lost health insurance and the trickle down effect of the changes in the economic health of Jefferson County. This is particularly troubling when, for the reasons noted above, the reductions required of industry likely will not provide a significant environmental benefit since so many other contributors to presence of TACs are not being addressed.

D. STAR WILL NEGATIVELY IMPACT BUSINESS COMPETITIVENESS AND THE ABILITY TO RESPOND TO QUICKLY CHANGING MARKETS

1. Under the current regulations, it takes a considerable amount of time to obtain construction permits for even the most simple of projects. The proposed regulations will further delay and burden the process for all permits regardless of the source's potential to emit measurable amounts of the targeted chemicals. At the current time, the District is telling permittees that the review of a modification, even for replacement equipment, will take as long as 12 to 18 months to complete. Despite this, the District insists on requiring construction permits for even equipment changes that will reduce emissions in Jefferson County. Currently, there are at least three companies in Jefferson County that have proposed to replace existing pollution equipment with new, better designed operating equipment, that have been unable to obtain construction permits because of the overload on the District staff. In short, the District is not effectively implementing the current air regulatory program for which it is responsible. The proposed increase in work for the District under this new program, despite the potential new hires, will only lead to further backlogs of traditional modifications, which in turn will delay the implementation of projects that will reduce air contaminants in Jefferson County.

2. Permitting delays and additional Jefferson County specific requirements for process changes or new processes will make it even more difficult to respond to marketplace changes in a timely, predictable manner, and will discourage modernization and expansion in Louisville. Furthermore, the expanded requirements for "new or modified" sources provide a strong disincentive for

new investment at this facility or for any prospective employers to locate in the County. For example, two expansions originally planned for the Noveon Louisville plant will be located elsewhere. The huge uncertainty surrounding the actual implications of the STAR regulatory package and the probable delays in permitting were instrumental in the decision to not pursue expansion in Louisville. The two expansions would have created between 10 and 20 new jobs and $18 million of investment in a growing business.

3. Under the proposed program, there is a disincentive to making any modifications. A streamlined permitting process should be added for the following:

   a. Reconstruction or replacement of air pollution control equipment with equivalent or more efficient equipment;

   b. Installation, construction, or replacement of air pollution control equipment for an existing process or process equipment for the purpose of complying with the federal HAP standards; and

   c. Installation or construction of air pollution control equipment for an uncontrolled existing process or process equipment.

4. STAR's scheme for dealing with de minimis issues is very onerous and difficult to understand. Additionally, only some of the regulated chemicals are listed in the provided tables. It is not clear whether the insignificant and trivial activity exemptions are applicable to new construction given the District's position in other circumstances that the flexibility afforded by the Title V operating permit provisions is not available with respect to construction permits. Considerably more development time and effort is needed to make this a functional section of the regulations.

5. The District has not allowed enough time for implementation of the program. Based on the current language, new requirements under the proposed regulations would have to be enacted immediately for some of the regulations, which will not be feasible for many companies. This schedule is unworkable and unfairly places companies at risk of violations and penalties. This is particularly true with respect to the enhanced LDAR program.

E. STAR IS NOT BASED ON SOUND METHODOLOGIES

1. The District has incorporated methodologies developed for other state or local programs and has not incorporated all of the

provisions of those other programs into the STAR program. In many instances, the District has omitted necessary provisions that should be included in the STAR program in order to make it reasonable, technically sound and achievable. Further, the District has in many instances amended the provisions of the other programs, or does not apply the methodology of the program in the same manner as done in the other state or local program. These methodologies, as modified by the District, have not been subjected to peer review, and because they have never been previously implemented, the District cannot possibly know what the actual outcome of result of this inappropriate and unreasonable mixing of methodologies and omission of key requirements may cause. Further stakeholder review and evaluation is necessary.

2. KRS 77.155(2) provides the Board with the power "by regulation, to fix reasonable limits, by weight or otherwise, for particular air contaminants or other material which in the opinion of said Board may cause or have tendency to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public." The STAR program is not based on sound science, is unreasonable given the limited emission reductions to be achieved compared to the cost of those reductions, and including many other deficiencies as outlined in these comments. Adoption of the STAR program as proposed would be contrary to the Board's statutory mandate.

F. THE LENGTH OF THE PUBLIC COMMENT PERIOD FOR THE PROPOSED STAR PACKAGE HAS BEEN INADEQUATE

1. The scope and complexity of air toxics and risk, as well as the interplay between local, state and federal rules regarding air toxics, mandate a broader and more deliberate consideration. A thirty day comment period is insufficient. By letter dated February 10, 2005, LCP requested that the comment period on the proposed regulations be extended by 30 to 60 days. LCP certainly hopes that the Board will grant its request so that LCP can supplement its comments. Since the Board did not act on the request before the existing February 14 deadline, LCP has done what it could in the time allotted to pull together meaningful comments.

2. Sometime following the notice of the proposed regulations, a chart of "Benchmark Ambient Concentrations and Associated *De Minimis* Values" was posted on the District's website. Below the chart was language revising the regulatory proposal. Additional changes were apparently made on or about February 5. The District did not comply with public notice procedures. The District needs to republish the entire regulatory package and include the

revisions it has placed on its website as well as any other changes of which the public has not been notified.

II. COMMENTS ON SPECIFIC REGULATIONS

A. REGULATION 1.02 – DEFINITIONS

1. Section 1.6 – "Ambient Air" – The definition of "ambient air" for purposes of this local regulatory program should be changed so that it is limited in scope to air to which the general public could have access. The air toxics regulatory program was purportedly designed to address concerns about exposures to the general public. The Occupational Safety & Health Standards address employee exposures and are protective of employee exposures on the plant sites. As EPA representatives have explained in the context of implementation of the similar federal residual risk program, the point at which risk is evaluated is the point at which the general public would be exposed. As EPA stated in 2003: "We do not feel that considering an 'ample margin of safety' means that we must demonstrate no risk or adverse health effects for a theoretical person living at the fence line. Rather it is important to assess the risks at locations where people most likely reside." 68 Fed. Reg. 70904, 70916-917 (Dec. 19, 2003). As proposed, risk levels will be applied inside plant boundaries even though there is no access by the general public. This greatly increases the chance that risk standards will be exceeded and trigger unnecessary controls. Additionally, risk factors used in the regulations are based on 24 hour exposure for 70 years – clearly such exposures are not possible in plant parking lots, neighboring industrial facilities and similar areas.

2. Section 1.30 – "Excess Emissions" - LCP believes that a specific standard must exist to determine excess emissions. Therefore, LCP requests that the District eliminate the last sentence of this paragraph and the reference to surrogate standards.

3. Section 1.60 – "Process" – The proposal changes the definition of "process" to add "use of a material." This change is not a clarification as suggested by the District but an expansion. As a result, a change in materials will trigger additional permitting review and TAC evaluations. Given the District's backlog, this expansion of the definition will only result in further delays. Changes in new materials should not result in additional requirements unless they result in an increase above permitted emissions.

4. Section 1.74 –"TACs" - The purported justification for pushing through these requirements was the West Jefferson County Community Task Force study of Jefferson County air. That work identified 18 chemicals of concern. If those were the chemicals that were identified as being present in ambient air potentially above acceptable risk levels, those are the compounds that should be regulated. The list has been expanded, however, to include many other compounds without justification. This creates a huge additional compliance burden for all stationary sources in Jefferson County without a concomitant environmental benefit in light of the data used to justify revisiting the air toxics regulatory program.

B. REGULATION 1.06 – STATIONARY SOURCE SELF-MONITORING, EMISSION INVENTORY & REPORTING

1. By removing the pre-existing clause "in accordance with such requirements as specified in these regulations," it appears that the District has expanded its authority to require emissions or parametric monitoring at any facility for any reason, or for no reason. The requirement for a facility to invest in monitoring equipment should be tied to the need to comply with specific regulatory requirements. Even under Title V, monitoring must be tied to an applicable requirement. In addition, there will be cases where it is not feasible to install or properly operate in-stack monitors due to technology not being available or physical constraints associated with point sources. Alternative monitoring and flexibility need to be allowed and clearly stated in the regulation.

2. The regulation was not proposed until January 2005 and will not become effective until later this spring at the earliest. Accordingly, the requirement to report 2004 data is an impermissible retroactive application of a legal requirement and constitutes arbitrary and capricious agency action.

3. LCP requests that the various July 15 deadlines be shifted to October 15 to assist in balancing reporting requirements for other environmental regulations. In consideration of Comment 2 above, the earliest deadline for submittal of the enhanced emission statements would be October 15, 2007.

4. This regulation adds an unnecessarily burdensome reporting requirement. The proposed regulations appear to require that all affected sources report all of the 190 chemicals they have on-site. Additionally, it is not clear what source of data will be acceptable to determine if any of the targeted chemicals are on-site. MSDS

information should clearly be identified as an acceptable source for information about constituent levels in a mixture.

5. The emissions-related data reporting requirements should be tied to emission levels rather than permit type. For facilities that are not major HAP sources at the time of adoption of the regulations, it is appropriate to have less onerous reporting requirements regardless of the type of permit issued for the facility. There should be a benefit for facilities that reduce emission levels.

6. The PRIA should explain the justification for the additional time, effort, and expense involved in collecting data required under these proposed rules.

7. Section 3 – Under current Title V Operating permits, facilities have already submitted to the District how they calculate emissions from their facility. Absent prior notice from the District, those methodologies should be considered adequate. For example, if a facility utilizes an AP-42 emission factor to calculate a particular HAP emission rate, and has listed this as part of its permit application, the question of how the plant would be required to calculate HAP under the proposed regulations should be the same. It should also be noted that AP-42 factors are considered conservative estimates based on data collected from industry and that they may actually over-estimate emissions.

8. Section 5. - There is no valid legal or scientific basis for requiring the reporting of "uncontrolled emissions." This term as defined in the proposed regulation does not represent any actual emission rate and will not provide any meaningful information. Additionally, interdependent controls and process constraints should not be excluded from determining potential maximum emissions.

9. Section 5 - Many of the details required in this section are needed only if the facility opts to run the advanced models in Regulation 5.22. Those facilities that have compiled this detailed information for the advanced models of Regulation 5.22 can submit such as part of their modeling effort, while all other facilities may be reasonably relieved of this administrative burden. This will be less labor intensive and costly for many businesses, allowing them to focus their attention and resources on critical regulatory compliance issues.

10. Section 5.5 and 5.6 – The proposed regulation gives the District the authority to request submission of data from a facility but it does not specify a time period. Any request must allow a reasonable period of time for response.

11. The District should provide support devoted to assisting companies that will have to comply with the new program in light of the cost/time that will be needed to perform calculations, gather data, create drawings, install software for data collection, etc. This is a very costly and burdensome set of requirements with which facilities need to comply in an overly tight time frame.

12. Section 5.3 - LCP has serious concerns about the District's proposed Regulation 1.06 Section 5.3 that requires facilities to provide a detailed plot plan showing property line, fences, scale, buildings and UTM coordinates. LCP believes that this information is sensitive from a security perspective, as it will provide locations and descriptions of various structures. Security guidelines following September 11, 2001 advise facilities that handle chemicals not to provide detailed plant information that would be available to the public. LCP requests that the District allow facilities to keep the required information on-site and make it available for review upon request.

C. REGULATION 1.07 – EXCESS EMISSIONS DURING STARTUPS, SHUTDOWNS, AND MALFUNCTIONS

1. The amendments to Regulation 1.07 are not rationally related to the District's justification for the STAR program. See preceding comments.

2. The definition of "emergency" should not be eliminated. The emergency defense is an element of the federal Title V operating program.

3. Section 2.2 – Excess emissions from a process or process equipment due to startup, shutdown or malfunction should not automatically be deemed a violation of the applicable emission standard. The existing regulation addresses this issue appropriately by first assessing certain factors before determination of a violation is made. That approach is consistent with state and federal law. Although the District asserts that EPA rules require this change, EPA has taken no official action to disapprove the SIP on this basis. For that matter, the Kentucky regulations at 401 KAR 50:055 provide that the agency can determine that excess emissions should be excused upon a showing of certain factors — that regulation remains part of the approved SIP.

4. Section 2.1 and 4.4 - It can be expected that despite best efforts and good maintenance, circumstances can arise to cause equipment to fail or malfunction. For that reason, regulations establishing agency notifications and procedures to address and respond to

these conditions were adopted. Typically, the first standard to be at risk of being exceeded during a malfunction or emergency startup or shutdown event is the technology-based or process-dependent emission limit (e.g., pounds per million Btu or pounds per gallon of coating solids applied). Such limits are usually based on steady-state operation, fixed level of emission control and the maximum production level. On the other hand, the time-based emission rates (pounds per hour, pounds per month, etc.) which are more relevant to public health concern tend to be lower than limits during startup and shutdown conditions and may be achievable during malfunctions. Therefore, shutting down the process may not be necessary to protect public health, and it should not be considered as a general duty requirement under this circumstance. Note too that shutdowns can trigger greater emission levels in the short term which may exacerbate air quality concerns.

5. Section 2.1 – The requirement to remain in compliance with all emission standards during start ups and shut downs should not apply for emission standards that are specifically not applicable during startups and shutdowns or other exempted operational conditions as cited in various regulations. For example, see District Regulation 6.07 Standard of Performance for Existing Heat Exchangers Section 3.2 and 4 District Regulation 7.06 Standard of Performance for New Indirect Heat Exchangers Section 4.2 for opacity. LCP requests that the District add "except where exempted by regulation or permit" to the end of the first sentence of this paragraph.

6. Section 2.3 – When determining whether stopping input feed or shutting down process equipment is completed "as soon as possible," it should be taken into consideration the time it takes facility personnel to investigate the root cause of the malfunction or to determine whether the malfunction is actually causing an emission exceedance or whether it is a malfunction of the monitoring equipment, for example. The time necessary to stop input feed or shut down processes/pollution control equipment in a manner that will not cause damage to the equipment or endanger the safety of the facility personnel must also be a consideration.

7. Section 2.6.3 – Electronic mail notification date and time should be determined by when the e-mail was sent by the facility not when the e-mail was opened (received) by the recipient at the District. Server downtime at the District and other e-mail interruptions are out of the control of the reporting facility and should not result in a noncompliance or violation.

8. Section 3.2 – As drafted, notification of emergency startups and shutdowns for which excess emissions are expected to occur must be given within 1 hour compared to the current requirement of "as promptly as possible, but no later than one day following the determination to shutdown or startup." Changing the notice requirements to such a short time frame is unrealistic for all situations. It is noted "excess emissions" that could threaten public health will be reported under CERCLA or EPCRA to the National Response Center (NRC) and Local Emergency Planning Committee (LEPC) activities. In such a situation, crisis management efforts will likely be unfolding and corrective response actions will be underway. For situations that do not pose a threat to public health, normal response actions will be undertaken and a prompt notification should be sufficient. For these reasons, notification of such events should be a tiered approach. When notification must be made to the NRC and/or LEPC, then notification should be made to the District, although it would be preferable for the government agencies to coordinate such communication, especially during a time of crisis. However, when notification to NRC or LEPC is not needed, then the current prompt reporting should be sufficient. The proposed rule should be revised to accommodate such notice. In addition, written notification should be made once the emergency situation is resolved and review can be made to assess the matter, typically 7 days after the event or after emission computations can be made.

9. Sections 3.3 and 4.3 – The text, "A call placed to the emergency number 911, constitutes notification to the District" should not be removed from the regulation. During a true emergency, fewer phone calls allow facility personnel to focus their attention and effort on minimizing the impact of the event. Calling 911 to notify all the local agencies in an emergency simplifies reporting for the facility. If District is experiencing difficulty receiving timely notification of 911 calls, then the District and the Emergency Management Agency need to rectify this problem instead of putting an undue burden on the facility during such a labor intensive situation. In any event, only one type of report should be required for after-hour reporting to avoid duplicative reporting both through e-mail and phone voicemail. For example, all the information could be given either by e-mail or phone voicemail, but should not be required for both.

10. Section 3.5.7 – In some cases, excess emissions during a startup or shutdown may be anticipated because of past experiences and as a further complication, may have been caused by various reasons. Hypothetically, a facility may report on the initial notification that excess emissions may be encountered during a startup or shutdown

due to past experiences not actual data that indicates excess emissions will definitely occur. During the initial notification, the risk of excess emissions may only be a possibility. Therefore, the reason (as required in this section) would be unknown. Considering this, Section 3.5.7 should be an optional item on the initial notification. This information can always be given during follow-up reports if not given (or known) at the time of the initial notification.

11. Section 3.8.7 – Facilities should not be required to provide this information to the District because it will be (and presently is) information already provided to the District by the facilities. This is a duplicative reporting requirement for the facility that requires a comprehensive data base that should be created and maintained by the District. Therefore, this item should be deleted.

12. Section 4.1 - The phrase "...as promptly as possible, but no later than 1 hour following the start of the malfunction, notify the District..." should be replaced with "...within 1 hour **or as soon as possible** following the start of the malfunction, notify the District...". This allows more flexibility for the facilities to provide all the required information to the District in a timely manner. One hour in most cases will not allow enough time to thoroughly investigate the malfunction (or existence of a malfunction or true exceedance). This short time frame for notification could lead to mistakes and/or confusion in reporting and more paperwork if facilities are not given an appropriate time frame to investigate and report during these labor intensive situations. Requiring reporting within 1 hour does not decrease emissions or improve air quality, but rather could increase paperwork and confusion.

13. Section 4.2 – The amount of detail required to be reported is not needed, nor is it likely to be readily available, especially as soon as the initial notification is being requested. Typically, only notice of the malfunction and basic information should be all that is needed for the initial report. A follow-up written report can provide additional information once the cause and impact of the malfunction has been determined and any preventative plans have been evaluated. As noted above, notifications to the NRC or LEPC will have occurred if there is an acute risk to those outside the facility.

D. REGULATION 1.20 – MALFUNCTION PREVENTION PROGRAMS

1. The regulation fails to specify adequate criteria for evaluation of the District's decision to require development of a malfunction

prevention program. For facilities and the public to clearly understand when a malfunction prevention program may be required, the District needs to include the methodology for evaluating whether a program is needed and the parameters by which its exercise of discretion will be judged. Omitting these criteria invites unfair subjectivity in implementation of this regulation.

2. Section 1 – The occurrence of limited and isolated malfunctions should not cause an individual facility to enter a "Malfunction Prevention Program." Facilities that experience malfunctions that "...are of a repetitious nature, or when more than 12 failures of the same or similar pieces of equipment occur in a 12-month period..." would be more appropriate candidates for the "Malfunction Prevention Program." Language that presently resides in Section 4.2 of Regulation 1.07 could serve as a good indication of whether this draft regulation becomes applicable in a given situation. This text has been deleted from Section 4.2 of the proposed rule. It should not be deleted for reasons given in the comments for draft amended Regulation 1.07 Excess Emissions During Startups, Shutdowns, and Malfunctions.

3. Section 1.1.2 – There are no established criteria for determining when a malfunction "may have occurred." Therefore, LCP requests that this language be removed from this regulation.

4. Section 1.1.3 – This section purports to give the District unfettered discretion. Criteria for the District's determination of whether "...a malfunction that may become harmful to public health or welfare..." should be added. Otherwise the regulated community is at risk for arbitrary and capricious agency action.

5. Section 3.3 – The requirements should be stated in the operating permit as District-only enforceable requirements and only by reference. Referencing the plan will allow ease in maintaining an evergreen document. There is no need for public review and comment on malfunction plans. The expertise for reviewing and approving these plans lies within the District staff. Alternatively, the regulation should provide that the public notice required for permit revisions will satisfy the requirements in the regulation for public notice of the malfunction plan.

6. Section 3.3 – The regulation should provide a time period for starting implementation of the "Malfunction Prevention Program" after receiving notification from the District that the "Malfunction Prevention Program" has been approved. Alternatively, LCP suggests that one of the Program elements should be the start date

for implementation, not to exceed 60 days from the date of District approval.

E. REGULATION 1.21 – ENHANCED LEAK DETECTION AND REPAIR (LDAR) PROGRAM

1. The District must fully explain the costs and purported benefits of these new requirements in the PRIA. The discussion in the PRIA certainly does not appear adequate. As with other portions of the PRIA, the information is merely a summary of conclusions with no supporting citations or references. LCP does not believe the slight environmental benefits are justified by the significant costs.

2. If the installation demonstrates compliance with the Environmental Acceptability in Regulation 5.21, Environmental Acceptability for Toxic Air Contaminants, it should not be subject to the requirements of Regulation 1.21, Enhanced Leak Detection and Repair Program. The regulation should be revised to change the definition of "affected facility" or provide an exemption for installations that demonstrate compliance with Regulation 5.21, Environmental Acceptability for Toxic Air Contaminants". In the response to informal comment 1.21-14, the District stated, "...the occurrence of a higher level of leaks or more significant leaks would increase the emissions beyond the level that is expected, and thus might exceed the environmental acceptability levels in Regulation 5.21. The purpose of an LDAR program is to minimize these unexpected emissions from leaks." However, the LDAR program is not a mechanical integrity program and will not impact the frequency, quantity, or concentration of leaks that develop. Therefore, the unexpected emissions from leaks will occur whether Regulation 1.21 is put in place or not. So long as leaks were considered in the determination of environmental acceptability, and the facility meets the risk goal for the chemical(s) subject to LDAR, then LDAR should not be required.

3. In the response to informal comments, the District has indicated it used the Texas Air Quality Study, and the Highly Reactive Volatile Organic Compound (HRVOC) LDAR program developed as a work product of the Texas Air Quality Study, as a justification for needing the enhanced leak detection and repair regulation. However, the District has failed to take into account some significant differences between the industries that participated in the study and the affected facilities located in Jefferson County. The Texas Natural Resource Conservation Commission (TNRCC, now known as the Texas Commission on Environmental Quality, or TCEQ) conducted the study to address extensive problems with attainment of the 1-hour ozone standard in the Houston-Galveston

severe non-attainment area. TNRCC joined the National Aeronautical and Space Administration (NASA) in fly-over studies of the Houston Ship Channel, the most industrialized local area in the entire United States, to identify specific contributors to the Houston area ozone loading into the airshed. TNRCC and NASA identified four compounds that disproportionately contributed to ozone formation over the Houston Ship Channel: ethylene, butylenes, propylenes, and 1,3-butadiene. With the exception of 1,3-butadiene, none of the HRVOC chemicals even appear on any of the proposed STAR toxic air pollutant lists.

Once these compounds were identified, TNRCC identified two facilities emitting substantial amounts of these chemicals, now known as HRVOC chemicals, to study in preparation for the January 2004 rulemaking. The Texas facilities were both olefin facilities which operate large pipelines at throughputs of 450,000 to 600,000 lbs/hour for each process unit. A fugitive leak at these types of facilities is significant because even the tiniest leak will emit large quantities of HRVOC material. Leaks at these facilities, as well as the numerous refineries and other large petrochemical facilities emitting HRVOCs, merit additional scrutiny. By comparison, the throughput of all of the facilities in Jefferson County that are currently subject to a federal leak detection and repair program don't add up to the throughput of just one olefin facility each day.

In addition, the olefin units predominantly process gasses, while the Louisville facilities process a combination of liquids and gasses. So, the impacts of a leak in Louisville are not significant because of limited throughput, lower vapor pressures, and vastly different chemistry being conducted by chemical plants in Jefferson County than the refineries in the Houston Ship Channel. Even TCEQ recognizes the differences between this isolated case and the LDAR programs required of non-HRVOC facilities and HRVOC facilities located in areas that are not severe non-attainment areas under the 1-hour ozone standard. The District has not conducted or published for public comment any analysis describing why such an onerous LDAR program is necessary in the very different Jefferson County airshed. If the District wishes to model an appropriate LDAR program on the Texas regulatory structure, it should pursue the 28VHP program, not the very-limited-case HRVOC program. Other LDAR programs exist around the United States that may serve as more appropriate models such as Michigan's R336.1628. Use of the Texas HRVOC program for non-HRVOC chemicals in the United States is unprecedented, unjustified and inappropriate.

4. Section 1.1.2 – The regulation fails to provide criteria by which to judge the District's determination that a facility should implement an LDAR program. The Board must establish criteria for such actions to limit the potential for arbitrary and capricious agency action. Any such determinations must also be subject to review.

5. Regulation 1.21 needs to be revised to incorporate the affected facility-specific federal LDAR program, rather than generically applying the HON, 40 CFR Part 63, Subpart H, because the federal LDAR programs are process and organic hazardous air pollutant specific regulations based upon the chemical, concentration, hours of operations and other requirements. The federal compliance requirements are targeted to components that are capable of emitting significant quantities of organic hazardous pollutants. As proposed by the District, the enhanced LDAR program does not adequately define the scope of the program as it applies to processes or chemicals used at affected sources. As a result, the District's program could conceivably apply to equipment within covered processes that have minimal hours of operation or dilute concentrations of organic HAPs even though emissions from such equipment are insignificant.

6. The enhanced leak detection requirements should only apply to major HAP and VOC sources and should not establish requirements that exceed the federal LDAR program by applying LDAR to non-major facilities. The District has provided no support for expanding the program to non-major sources in the PRIA. There has been no opportunity for public participation on the issue of whether the enhanced LDAR program should be expanded to non-major sources. Affected sources should be allowed to incorporate applicable portions of the federal LDAR requirements, to which they are subject, into the District LDAR plans by reference.

7. The chemical applicability has not been adequately defined. The District should revise the provision to clarify that the regulation applies to any affected facility to the same extent that the LDAR requirements under 40 CFR Parts 60, 61, or 63 apply to the affected facility. In response to informal comments 1.21-3, the District stated its intent more clearly than in the actual proposed regulation with regard to preserving the applicabilities of the original federal LDAR regulations as they apply to Regulation 1.21. LCP requests that the District add provisions clarifying the scope of the applicable subpart and that the provisions of Regulation 1.21, including the service requirements, do not apply to process units with a referencing subpart unless the process unit that uses the specific HAP listed in the referencing subpart is used

at or above the concentration for which the referencing subpart applies. For example, the minimum service criteria of the applicable federal LDAR regulations are 5% OHAP service [Subpart H] and10% VHAP service [Subpart V].

8. In response to informal comment 1.21-3, the District indicated its intent to preserve the applicability of the federal rule, including exemptions. However the language in the regulation does not make this clear. The proposed regulation should be revised to add the exemption codified at 40 CFR § 63.167(e) that addresses open-ended valves or lines containing materials "which would autocatalytically polymerize, or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system" as specified in paragraphs (a) through (c) of 40 CFR § 63.167.

9. The exemption for R&D facilities and bench-scale batch processes from 40 CFR 63.160(1) should be applied to Regulation 1.21.

10. The processes that are already subject to 40 CFR Part 60, 61, or 63 LDAR do not have identical requirements. The various federal leak detection programs have been developed over the years to address particular industries. They are not one size fits all. Examples of areas with differences between the federal programs are: written plan requirements; leak identification removal; calibration gas; schedule for monitoring skip periods; valve, pump, connector, agitator, pressure relief device, instrumentation system, compressor, sampling connection system, product accumulator vessels, and control device requirements; and various alternative means. Overlaying the HON on source categories for which it was not intended will negate some germane exemptions found in the appropriate applicable source category LDAR program. Streamlining will not fix this problem, since the most stringent requirement must be chosen. Eliminating source category specific exemptions will have little value in reducing TAC emissions, since the reason the exemptions exist in the first place is because there are minimal emissions associated with the exempted process/equipment.

11. During the informal comment period, the regulated community pointed out that: "There's a much higher likelihood for compliance to be achieved by simply adjusting (lowering) the leak definitions within the existing applicable federal LDAR programs." The District has misinterpreted the informal comment. The comment was suggesting applying the lowered leak definitions to the existing federal LDAR program applicable to the particular facility

instead of applying the lowered leak definition and requiring all facilities use the HON program for LDAR.

The District argues that not all LDAR programs are the same, which is true; however the enhancements provided in either the draft regulation or the GLI revised regulation proposed by Greater Louisville, Inc., eliminate the major differences in the various LDAR programs and thus support the desired emission reduction without requiring every company to standardize on one LDAR program.

The District's insistence on HON program standardization for all companies smacks of convenience for the District at the expense of affected facilities. Even with streamlining, the various facilities will still have differing LDAR requirements and the apparent convenience to District inspectors will be lost.

12. Section 1.4 – The leak definitions at Section 1.4 are arbitrary. The leak definitions should be changed to be equal to 50% of the HON leak values. This change would meet the District's goal of being more stringent than the federal rules and potentially reducing emissions, while being reasonable levels for facility action. Also, new definitions for leaks should be revised to reflect the federal rules' recognition that pumps in different services have specific leak definitions for valid reasons. Different screening concentrations for 'light liquids' and 'heavy liquids' are appropriate because of the differing vapor pressures. There is no distinction made for service for all components - i.e. reactive monomer service and food/medical service. This should be made consistent with the MACT LDAR programs, particularly with respect to pumps. In addition, 40 CFR 63.163(c)(3) provides that pumps subject to the 1,000 ppm leak definition do not require repair unless the instrument reading is 2,000 ppm or greater. There are sound reasons for the differences. In particular, the reason for the language in Section 63.163(c)(3) is that first attempts at repair have the potential to cause serious problems, up to and including catastrophic failure, of pumps that may be running as well as can be expected. The definition should establish different screening concentrations depending on the type of component that is monitored. In addition to the components listed in the definition, different screening concentrations should be established for connectors, pressure relief devices and instrumentation systems.

13. The District has added several subclasses of equipment that are already covered in various LDAR programs. The following equipment are already considered in the connector category: blind flange, heat exchanger head, bolted manway and hatch, as well as

the connections for a sight glass, meter, and gauge. These do not need to be singled out.

14. Monitoring of equipment that has not traditionally been considered a significant source of equipment leaks (such as sight glasses) should not be required. The effort, and for some companies the expense, does not justify the marginal gain in emissions reductions, if there is any.

15. If connectors, agitators, and/or sampling connection systems are already covered in a Federal LDAR program, then they should not be included in the District program in Section 3.1 or in the accounting of leakers in Section 3.2. Including these equipment types in both the federal leak calculation and the District leak calculation is misleading.

16. The chemical applicability of the regulation has still not been adequately defined. The unintended consequence of using the term "organic compound" is Regulation 1.21 does not specifically state it applies only to the same regulated substance as the 40 CFR Part 60, 61, or 63 applies. As currently phrased, "organic compound" can be construed to expand the District's LDAR program to all organic compounds, not just the HAPs that trigger the federal LDAR program. This needs to be corrected.

17. The program should be revised by deleting provisions, such as Sections 1.6, 3.1 and 5.3 relating to water seal controls and process drains, which were taken in part, but not in total, from Texas regulations. Incorporating a portion of a regulation is inappropriate. The provision was used out of context with the rest of the Texas regulation, which included limitations on the applicability of the requirement based on concentration and flow rate of the regulated wastewater.

18. Section 1.11 – As currently written, this regulation will be effective the day it is adopted. However, changes to a facility's LDAR program cannot happen instantaneously upon the adoption of the regulation. The addition of compliance dates will allow the facility to develop the new additional elements of the enhanced program and work them into its existing program. In addition, the definition of "affected facility" includes sources subject to promulgated MACT standards for which a compliance date is in the future. This definition makes these sources almost immediately (as soon as 120 days) subject to requirements for which the facilities may not have yet made preparation (tagging, training, etc.). The source should be subject to these requirements on the same schedule as the MACT standards. For example,

facilities subject to the MON MACT must be in compliance with the MON MACT LDAR requirements by November 10, 2006. Normally, a new MACT standard allows the facility three years to come into compliance. In an effort to address the community's concerns, LCP proposes that such facilities be in compliance with the LDAR requirements of a new MACT in only two years.

19. Section 3.8 – This provision improperly gives the District unfettered discretion to require additional monitoring and fails to specify any criteria upon which the propriety of the District's demand can be judged. The grounds for requiring additional monitoring should be added to the regulation.

20. Section 3.9 – LCP supports the option to use a continuous leak monitoring system in lieu of a more prescriptive leak detection program. This would provide added flexibility in achieving the same results. Since EPA was so supportive of this method of leak detection, area monitoring should be made an alternative that does not require District approval.

LCP requests the District amend the language in Regulation 1.21 section 3.9 to read as follows:

"Federal leak detection and monitoring programs that utilize continuous monitoring of the ambient environment with an alarm system will be accepted as an equivalent alternative to the requirements listed in 3.1 to 3.7. The owner or operator of an affected facility that is not federally required to use continuous monitoring of leaks with and alarm system may propose to the District for approval a leak monitoring program that uses continuous monitoring of leaks with an alarm system that may be used to replace the monitoring requirement of sections 3.1 to 3.7. "

21. Section 4 – During the informal comment process, one of the points made was: "Need to define how you deal with a leak that has been reduced from >10,000 ppm to <10,000 ppm (although not stopped yet) through extraordinary efforts. It should revert to "regular" repair from "fast track" repair schedule." In the District's response to informal comment 1.21-27, it is stated, "A significant leak that received only a partial repair may degrade again to the level of a significant leak." While this is an appropriate statement, it is applied inappropriately. The District appears to believe the hypothetical partially repaired component in the comment would never be repaired. That is incorrect. All that is being suggested is that the partially repaired component be

repaired on the same schedule as components that never leaked above 10,000 ppm.

22. Section 4.1 – Although usually possible, a first attempt is not always possible within one operating day of detecting a leak (may have to construct scaffolding, employ contractors, empty equipment, write lockout plans or procedures, etc.). Efforts to make such repairs may be undertaken within one day. For example, if a first valve off a storage tank is leaking and requires deinventory or other extraordinary procedures to repair an attempt, additional time for a first attempt is warranted. Additionally, where the component is probably already listed as difficult-to-repair, the time period for the first attempt at repair should be three days. LCP urges the District to change this requirement to three days.

23. Section 4.4 – The federal LDAR program already requires extensive documentation for "delay of repair" and since, by practical necessity, a facility's staff requirements to implement the very detailed program require more than one person be aware of the decision, another supervisory signature should not be required.

24. Section 5.2 – Shaft sealing systems should only be required of equipment meeting the minimum service criteria of the applicable federal LDAR regulation: 5% OHAP service [Subpart H], 10% VHAP service [Subpart V], etc. In the District's response to informal comments the intent to enhance the federal LDAR requirements is stated. However, there is little value in requiring expensive equipment alterations for equipment that is not considered regulated by the applicable federal rule because its contents are so dilute. Leaks from equipment in dilute service are insignificant in their total mass of emissions. In some cases, the material's solubility is lower than the service requirement and no emissions would be expected. Therefore, requiring shaft sealing systems for equipment in dilute chemical service is not a cost effective use of limited capital resources. In addition, if the leaks from such a shaft system are significant enough to require controls beyond frequent monitoring, closed vent conveyance to a control device must be included as a control option in lieu of shaft sealing systems. The District should refer to 40 CFR 63 Subpart SS for closed vent requirements when closed vent conveyance is used for LDAR components requiring emissions controls.

25. Section 5.2 – states the following: "A pump, compressor, or agitator installed on or after July 1, 2006, shall be equipped with a shaft sealing system that prevents or detects the emission of VOCs from the seal." The deadline should be extended to July 1, 2007 in

keeping with the delay in adoption of the rule. By the time Regulation 1.21 is adopted, the suggested change will maintain approximately the same length of time to address these equipment changes as the original proposed rule did.

26. Section 5.6 – Regulation 1.21 should be revised to use the same terminology as the MACT standards, such as "unsafe-to-monitor" and "difficult-to-monitor," instead of developing a new set of terms. Furthermore, the District should extend the applicability of these federal concepts to all the additional components added to Regulation 1.21.

27. Section 8.2 – The terminology "continuous vacuum service" should be changed to "vacuum service" to make it consistent with the federal definition. "Vacuum service" is defined in various MACT LDAR programs and is nationally accepted and applied.

28. Section 11 – This requirement is unnecessary and unduly burdensome. The requirement in Section 11 to prepare, submit for approval, and implement a data quality assurance and control plan for leak detection and repair technicians does not take into account the situation where a third-party contractor performs the monitoring. The contractor is paid to remain cognizant and to perform in accordance with EPA guidance related to how many components a well-trained technician can legitimately monitor per hour or day.

29. Section 12 – As proposed by the District, it is not clear whether the purpose of the third-party audit program is to verify the facility's leak rate or determine if leaking components have been repaired. The presence or absence of equipment leaks is not a violation of any applicable requirement, since all LDAR programs allow leaks, so long as the repairs are conducted as required under the underlying applicable requirement. If the purpose is to verify the leak rate, then the monitoring required is in vain. Repairs made to leaking equipment will change the leak rate measured and no verification will be forthcoming. If the intent is to determine if leaking equipment has been repaired, then only equipment that has leaked should be considered for monitoring. In short, this auditing program is not rationally related to a valid regulatory objective and should be deleted. The remaining program elements will still demonstrate that the monitoring performed by the affected facility is comprehensive and complete. The District has not justified the costs, given the lack of benefits to the community, in its PRIA. This unprecedented program cannot be justified technically or economically.

30. Section 12 – This requirement is unnecessary and should be deleted for other reasons. First, the District has the ability and the duty to inspect and evaluate compliance. Second, given all the reports and certifications required, there are sufficient administrative and legal mechanisms to assure that programs are being implemented as required. Third, the audit requirement will do little or nothing to reduce the emissions of toxic air contaminants. For example, if an audit uncovers one unmonitored valve in light liquid service, the additional emissions not previously accounted for will be approximately 0.01 lb/yr. (This value is low because the equipment is assumed not to leak; if it had leaked, it would have been found and accounted for while monitoring other nearby equipment.) Even if ten unmonitored pieces of equipment were found by the audit, the cost of the program (at $5000 to $20,000/audit) does not justify the infinitesimal emission quantification.

31. Section 13 - The requirement to develop an LDAR Plan should be limited to affected facilities that are not subject to an existing LDAR program, in order to reduce superfluous requirements on affected facilities already subject to an existing LDAR program. The plan requirement is considered appropriate for facilities that do not have existing, defined LDAR programs; therefore, it should retained as applicable to Section 1.1.2 facilities only.

32. Section 13.2 and 14.2 – An LDAR plan is required within 120 days of promulgation of this regulation. Since the technology for monitoring inorganic substances is still evolving, the period for developing a plan should be extended to 180 days to allow time to research available equipment, run trials to determine suitability, and procure appropriate monitoring equipment, if available. The District assumes that the regulated companies have unlimited resources to address manpower-intensive immediate requirements for enhanced emissions inventories, LDAR plans, modeling, etc. The timing to implement all of these requirements simultaneously has not been adequately addressed and justified by the District in the PRIA.

33. Section 14 – Given the small universe of inorganic chemicals to which this requirement could apply and the fact that facilities handling those materials are already likely subject to process safety management regulations, including mechanical integrity requirements, there is no justification for adding these requirements. If the District is determined to take some action on this issue, the HCL MACT is the only LDAR program that addresses leaks of inorganic compounds. Affected sources should

be allowed to incorporate applicable portions of the federal LDAR requirements to which they are subject in the District LDAR plan.

34. Section 14 – In addition, the District has not fully clarified the applicability of Section 14 for inorganic LDAR despite the District's response to informal comments. As it stands, the current phraseology still has the unintended consequence of subjecting to the District's inorganic LDAR program all inorganic TACs present at affected facilities with federal *organic* LDAR programs. This is clearly not the District's intent since the response to informal comments states, "Other than the 'HCL MACT,' there is no other required LDAR program that addresses leaks of inorganic compounds. Thus, no other process unit would be defined as an affected facility pursuant to section 1.1.1." The statement the District added to Section 2 of the regulation does not correct this unintended consequence. The District should consider citing the appropriate sections of 40 CFR 63 Subpart NNNNN as the applicable requirement for inorganic leak detection monitoring to alleviate the confusion.

35. Section 14.1 – Alternatively with respect to the planning requirement, the HCL MACT only requires that the facility develop a site-specific program, which is expected to consist of audio, visual, and olfactory monitoring, and is not intended to require instrument monitoring systems that do not exist. Thus, requiring repair procedures may be inappropriate. Likewise, process repairs are dependent upon the specific situation so prescripted repairs may not be appropriate and may even be detrimental. It is not appropriate to keep monitoring data as part of the plan. LCP suggests changing the requirement to "the method for data recording and recordkeeping."

F. REGULATION 2.08 – EMISSIONS FEES, PERMIT FEES, PERMIT RENEWAL PROCEDURES, AND ADDITIONAL PROGRAM FEES

1. Section 6 – This proposed fee structure represents a significant new tax on Title V sources in Jefferson County. A per facility or per substance cap on fees associated with TACs should be instituted. It is unfair to force large facilities to pay for the bulk of the program, particularly when the District is postponing a study for the need for any regulation of equally or more significant contributing sources: mobile sources and area sources such as dry cleaners. The District regulations already include use of caps in Section 1.3.2 for the calculation of Title V emission fees.

2. The District has not disclosed the source of future funding of the STAR program. While the PRIA states that 31% of the FY2005 funding will come from Title V companies, the PRIA fails to mention that the remaining funding for the FY2005 budget for this program comes from temporary sources, including the VET surplus and an EPA grant. In the response to informal comments, the District stated that "The future overall fee structure of the STAR Program has not been determined." A clear plan for funding this very comprehensive, and expensive ($702,000 in FY2005) program should be developed and disclosed to the public and regulated community. Without a clear plan, LCP is concerned that the fees have the potential to be unfairly significant for the small number of Title V sources in Jefferson County, if promulgated as proposed.

3. The selected reporting period of 2002, used to serve as the basis for emission fee allocation, should be changed to 2004. Like Title V, any required fee should be based on the most recent data (e.g., 2004 versus 2002) which should be available by the time any required fees need to be collected. In addition, while most of the TACs are HAPs, about a dozen are not HAPs and there does not seem to be inclusion of non-HAP emissions into the fee computation equation.

4. Section 6.3 – Since emission information from the smaller sources will not be available the first year, some assumptions will be necessary in the assignment of fees. However, in subsequent years, once emissions have been reported, the allocation of costs should be proportional to the facility's emissions for all facilities. In summary, there should be no base fee and no singling out Title V companies to pay the largest burden. As noted above, the District has not made it clear how the STAR program will be funded beyond FY2005.

5. The District proposes that major sources fund the major portion of the program based on their Title V status, regardless of actual TAC emissions. LCP believes the fee should be based on actual TAC emissions, providing a financial incentive in this proposed fee structure for a facility to decrease (or even eliminate, if possible) its TAC emissions.

G. REGULATION 3.01 AMBIENT AIR QUALITY STANDARDS

This rule is not necessary and should be deleted or revised. The EPA establishes the national ambient air quality standards under its authority in the Clean Air Act. Rather than have separate rules, reference to the federal ambient

air quality standards should be sufficient to avoid any inadvertent omissions or conflicts.

H. REGULATION 5.01 STANDARDS FOR TOXIC CONTAMINANTS AND HAZARDOUS AIR POLLUTANTS

1. Section 1.6 – LCP appreciates the District's recognition that *de minimis* criteria are needed to make the STAR program workable. However, additional refinements are needed:

   a. Section 1.6.1 extends the OSHA concentration requirement for a MSDS to the estimation of a TAC based upon a MSDS. This exemption should be extended to apply to process streams as well, so intermediates and wastes are evaluated against the same concentrations.

   b. Section 1.6.2 adopts the trivial and insignificant activity lists from the District's web site. The District should officially promulgate a list of insignificant and trivial activities within 60 days of the adoption of the STAR program. There should also be a provision for a facility to petition for an activity to be added to the list and receive a response within 60 days.

   c. Section 1.6.5 exempts surface coating processes for which the potential VOC emissions are less than 5.0 tons per year. Surface coating operations should not be singled out for preferential treatment. This 5.0 ton exemption should be extended to all types of processes using VOC. Neither the regulation nor the PRIA provides a basis for distinguishing between operations that have equal emission potential for VOC and associated HAP emissions.

   d. Section 1.7.1 exempts gasoline dispensing facilities that also include cold cleaners subject to Regulation 6.18 so that the cold cleaner emissions do not need to be calculated. This is reasonable since the small cold cleaners found at gasoline stations have negligible emissions associated with their operation. This exemption should be extended to all cold cleaners in Jefferson County.

2. Section 3 – This provision is vague and overly broad . Although it may be useful as a statement of a goal, it does not establish a sufficiently clear standard for purposes of assessing compliance and certainly is not a sufficiently clear standard when companies are exposed to the risk of daily civil penalties and criminal fines for violations. There can be scientifically valid differences of

opinion of what is harmful to human health and what "could be harmful to the ... welfare of humans, animals and plants." Given the District's revamping of the TAC program in response to perceived threats, this provision is outdated and should be deleted or simply restated as a goal to which the District aspires in establishing the revamped air toxics program.

I. REGULATION 5.11 – STANDARDS OF PERFORMANCE FOR EXISTING PROCESS EQUIPMENT EMITTING TOXIC AIR POLLUTANTS

If the STAR program is adopted, Regulation 5.11 should simply be repealed. These regulations are duplicative and could potentially conflict.

J. REGULATION 5.12 – STANDARDS OF PERFORMANCE FOR NEW OR MODIFIED PROCESSES OR PROCESS EQUIPMENT EMITTING TOXIC AIR POLLUTANTS

If the STAR program is adopted, Regulation 5.12 should simply be repealed. These regulations are duplicative and could potentially conflict. As was evaluated and concluded by the State and eventually repealed, this regulation has little or no impact on the emission levels and has consumed significant public and private resources (especially in the Title V permitting process).

K. REGULATION 5.20 – METHODOLOGY FOR DETERMINING BENCHMARK AMBIENT CONCENTRATION OF A TOXIC AIR CONTAMINANT

1. Benchmark ambient concentrations ("BAC") will establish a threshold risk level of less than one-in-a-million. BACs evaluate the worst case scenario and contemplate that a source emits the maximum possible TAC concentration for 70-years/365-days/24-hours without variation. Because the processes used to develop BACs for use in the proposed STAR program contain such conservative built-in safety assumptions, the risk of emissions from a stationary source will necessarily be overestimated.

   Use of presumed benchmark risk levels rather than actual human exposure risk levels disconnects the relationship between emissions, atmospheric dispersion ability and population exposure normally found in risk based standards. Please explain the rationale of this use of presumed benchmark risk levels.

2. The determination of whether a TAC is carcinogenic is important in assessing its potential health impacts. Only recognized national

and international databases should be used for this purpose: the U.S. EPA Integrated Risk Information System (IRIS), the International Agency for Research on Cancer (IARC), the Agency for Toxic Substances and Disease Registry (ATSDR) or the National Toxicological Progam The District does not have the resources to develop this expertise and should not spend local resources to do what these groups are entirely devoted to doing. Therefore, Sections 2.1.4, and 2.2 should be deleted.

3. Section 3 should be amended to provide that if a unit risk estimate (URE) has not been identified in IRIS, the the methodology presented in EPA's Tehchnology Transfer Network FERA Air Toxics Risk Assessment Reference Library shall be used to develop URE. This Library establishes the fundamental principles for risk-based assessment of air toxics and the application thereof.

4. Section 3.3 identifies criteria for the derivation of a unit risk estimate. The District accepts unit risk estimates that have been developed by EPA and included in IRIS (EPA's Integrated Risk Information System). The District should allow for use of IRIS unit risk factors that have been reevaluated by EPA but not yet officially adopted in IRIS. For example, in 1987, the EPA IRIS unit risk factor for formaldehyde was 1.3×10^{-2} ($1/mg/m^3$). Subsequently EPA re-evaluated the inhalation risk value for formaldehyde and, since IRIS has not been updated, EPA has refused to use the IRIS unit risk values on the basis that the values were outdated and no longer representative of the best science. Utilizing EAP OAQPS dose-response values, the benchmark ambient concentration for formaldehyde would be 2000 times higher than the District's proposed BAC. Failure to recognize and utilize the more current inhalation risk values is unscientific and arbitrary.

5. The use of factors from other states to develop cancer potency estimates is not appropriate. These factors, found in Sections 3.3.2 and 3.3.3, have not been demonstrated to have been developed based on peer-reviewed scientific evidence and data. Further, citizens of Jefferson County, Knetucky did not have the opportunity to comment on or otherwise participate in the development of these programs. Sections 3.3.2 and 3.3.3 should be deleted.

6. Section 3.3.4 should be deleted. The default value of 0.0004 ug/m3 for a BAC_C has not been demonstrated to be based on peer-reviewed scientific data appropriate for establishing specific, quantitative risk-based standards.

7. Section 4 should be amended such that a BAC for non-cancer risks shall only be determined on the basis of a Reference Concentration (RfC) established in IRIS or by use of the methodology presented in the Air Toxics Risk Assessment Library. Sections 4.2 and 4.4 should be deleted since the use of factors from other states is not appropriate for Jefferson County, Kentucky. Neither the specific scientific methodology used to develop these cancer potency estimates nor whether the determinations were based on peer-reviewed scientific data is provided.

8. Section 4.3 - This section states that an inhalation RfC can be extrapolated from an oral RfD, if an inhalation RfC is not available in sources identified in Sections 4.1 & 4.2. This route-to-route extrapolation, while seemingly logical., is not acceptable based on the current US EPA risk assessment methodology due to the unique pharmacokinetics following inhalation exposures.

9. Sections 4.3, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, and 4.12 should be deleted. Use of the methodologies and equations contained in these sections requires professional judgment beyond the expertise of both the District and the regulated community.

    a. Section 4.3 requires professional judgment involving extrapolation of toxicity data.

    b. Section 4.5 requires professional judgment to determine if occupational exposure levels are appropriate for an ambient, general population exposure level.

    c. Sections 4.6 through 4.11 require professional judgment to determine appropriate toxicological studies for the basis of the toxicity values to be used to calculate the BAC_{nc}.

    d. Section 4.12 requires professional judgment to determine the appropriateness of the toxicity values.

10. Section 4.11 – Section 4.11 should be deleted. The use of the stated "default" BAC when no other data is available has not been justified. If a BAC cannot be established from existing data, then the facility should not be required to assess non-carcinogenic risk.

11. Section 5 – Section 5 should be deleted. The District has neither the resources or the expertise to make these types of judgments. The determination of acute health effects from a TAC should be made only by EPA as stated in IRIS, ATSDR or the National Toxicology Program.

L. REGULATION 5.21 – ENVIRONMENTAL ACCEPTABILITY FOR TOXIC AIR CONTAMINANTS

1. Section 1.1 - More detailed information is needed on the factors that will be considered in establishing best available technology for toxics (T-BAT). It appears that there are few restrictions on the agency's discretion. Specifically, the consideration of work practices and production limitations in determining T-BAT should be deleted, since T-BAT is intended to define a technology and such considerations are not technology-based. Further, sources meeting MACT should be considered to have satisfied TBAT.

2. The District has proposed a best-available technology cost-effectiveness evaluation to ensure that any and all cost-effective controls are applied to reduce air toxics risks. The underlying problem with such rules is the lack of guidance that many agencies provide to facilities when evaluating cost-effectiveness for a specific application. EPA has addressed this issue in the Best Available Control Technology area, and is now in the process of addressing this issue in the residual risk program. The District should promulgate organic and inorganic cost targets to ensure clarity for the public when a control technology review is required. These targets can be adjusted during periodic rulemakings that are otherwise required to update air toxics regulatory values and fee structures.

3. Section 1.3 – This Section should be amended to provide that all processes or process equipment for which a construction permit application was received by the District prior to January 14, 2005 (i.e. prior to the Formal Comment Period for the STAR program) be considered "existing."

4. Section 1.5 - Similarly, Section 1.5 should be amended such that a new or modified process or process equipment is defined as a process or process equipment for which a construction permit application was submitted to the District after January 14, 2005.

5. Section 2.2.1 and 2.5.1 - In Sections 2.2.1 and 2.5.1, the environmental acceptability goal for non-cancer risk for an individual TAC from individual new or modified stationary sources and from existing stationary sources should be amended to a hazard quotient (HQ) of 1. According to EPA, no adverse effects are expected as a result of exposure for a HQ calculated to be less than or equal to 1. An HQ of 1 is the equivalent of the stated environmental acceptability goal of a cancer risk of 1 in a million. The HQ of 1 is consistent with the methodology used in the WLATS Risk Assessment, the residual risk standard determination

by EPA mandated by Congress under the Clean Air Act, and the National Contingency Plan.

6. Consistent with the above comment, the environmental acceptability goals for non-cancer risk for an individual TAC from all new or modified processes or process equipment specified in Section 2.2.2 are overly conservative and should be amended based on guidance provided by the National Contingency Plan. Similarly, the environmental acceptability goals for non-cancer risk for an individual TAC from all existing processes or process equipment specified in Section 2.5.2 should also be amended.

7. The cancer risk goal of 1 in a million for individual TACs is too conservative. This risk goal is not consistent with what EPA has determined constitutes an Ample Margin of Safety (AMOS) under existing federal standards that are based on risk. EPA uses 1×10^{-6} as a screening value and has defined an acceptable cancer risk range as 1×10^{-6} to 1×10^{-4}. LCP recommends that the District adopt this risk range.

8. The summation of risks for different TACs required in Sections 2.2.3 and 2.5.3 fails to take into account space and time variations in the modeling results and therefore leads to arbitrary results that have no meaning with respect to actual risk. Ambient air concentrations are dynamic because the occurrences of maximum concentrations of individual TACs vary in time and space. For that reason, it is inappropriate to sum such independent impacts together. Sections 2.2.3 and 2.5.3 should be deleted.

9. Section 2 – Section 2 contains tables with Ambient Goals or Standards for environmental acceptability for toxic air contaminants. However, neither the term "ambient goal" or "ambient standard" is defined in the regulation. The rule implies that goals can be modified, but the standards are lines which cannot be exceeded. To provide clarification and minimize confusion, the District needs to define these terms, how they are to be used and whether they are subject to enforcement.

10. Sections 2.8 and 4.8 – These sections should be deleted. Facililities should be evaluated only on an individual facility basis in the initial implementation of the STAR program. The technical difficulties involved with modeling emissions from multiple sources including temporal and spatial variations and toxicological uncertainties are significant and lend high levels of uncertainty to the application of this requirement.

Further, the community goal of reducing toxic limits to achieve a 1 in a million cancer risk is not attainable. Information from the EPA 1996 data shows that the lifetime cancer risk for benzene is between 3 and 10 in a million in Kentucky and between 10 and 30 in a million in Jefferson County. The issue is regional in nature, not specific to Jefferson County. Therefore, a county-wide risk cap is unachievable and inappropriate. (Source: http://www.epa.gov/ttn/atw/nata/maprisk.html)

11. Section 4 should be amended to extend the timelines for implementation of the STAR program. The current timelines do not allow sufficient time to implement the complex requirements of this regulatory package. Facilities will require time to arrange for additional manpower to implement the program, train personnel, develop significant additional record keeping and reporting systems, and make necessary arrangements with contractors.

12. Sections 4.11 and 4.13 – These sections provide that the District can require a facility to evaluate or re-evaluate compliance with the environmental acceptability levels if new data becomes available on the toxicity of a compound or if the District determines that ambient air levels are unacceptable. A minimum time period prior to re-evaluation should be established. Suggested time periods are seven years if no controls were required or ten years if controls were installed. This is consistent with the New Source Review Clean Unit Designation.

M. REGULATION 5.22 – PROCEDURES FOR DETERMINING THE MAXIMUM AMBIENT CONCENTRATION OF A TOXIC AIR CONTAMINANT

1. The District proposes that a cancer risk of 1 in a million should be met at the physical fence line under the proposed STAR program. In theory and in application, the District's approach is problematic and should be changed.

   The stated purpose of the Board in developing the STAR program has been to reduce the risk to the general population from air emissions. Therefore, the impact from emissions should be evaluated based on receptors at points to which the general public has access. That is the approach used by EPA in implementing the residual risk program and it makes sense for Jefferson County. For example, instead of a receptor in a plant parking lot, the receptor that is appropriately evaluated based on the Board's justification for the program is a receptor at the closest residence. Stationary sources should not be required to determine compliance at

locations in their parking lots, on neighboring industrial properties or on roadways — all places where people do not reside and where no one will be exposed for the 70-years/365-days/24-hours contemplated under the modeled exposure rationale currently used in the proposed STAR Program. This will result in an unnecessary burden that will result in no appreciable increase in protection for public health, especially given that the proposed STAR Program currently exempts area sources that are generally co-located with residences, such as gas stations, dry cleaners and others, and which may pose as great or greater risk of exposure to residents where they actually live than emissions from stationary sources.

The District should make allowances for industrial use corridors and transportation corridors. Although LCP does not endorse use of other state programs, to the extent the District has used the Michigan program in developing its regulations, the District neglected to incorporate the authority to increase any risk-based limit by a factor of ten at any location that was not likely to become a long-term receptor. Known industrial properties, roads, railroad track locations, and utility easements should at least be allowed a factor of ten risk adjustment to account for the absence of human receptors in these locations.

In addition, adjacent industrial sites should be able to petition to designate the combined location as a single site for air toxics purposes.

2. The use of the designated screening models, which were designed by EPA to "provide conservative estimates of the maximum ambient concentration," will significantly overestimate the actual risk posed to a resident living near a source. Such overestimation will result in actions to reduce the amount air toxics emitted by stationary sources, with no corresponding increase in the protection of public health.

   The proposed regulations are based on risks estimated from ambient air models rather than from exposure models. Ambient air concentrations may be used as a surrogate for the inhalation exposure concentrations for a population for screening-level evaluations. Such screening level assessments, which use simple models and result in conservative assumptions to estimate ambient air concentrations, assume continuous inhalation of outdoor air at the modeled location. Screening level assessments, which are typically used to prioritize further assessments, including whether a regulatory program should be developed, are appropriate for identifying potential risks. As a first step in determining whether a problem exists, screening level assessments are more uncertain

than risk assessments using more refined exposure modeling. Extrapolating a screening level risk, which estimates a potential problem, to a quantified exposure risk is not technically appropriate.

3. The District included a detailed, but incomplete, description of issues that must be addressed during any dispersion modeling demonstration. The number of issues that must be considered in a modeling evaluation, and the rate of change of these parameters, does not allow for timely and reasonable rulemaking. In addition, the District must provide some guidance concerning the use of standardized meteorological data when onsite meteorological data is used for a modeling demonstration. The District should provide appropriate ISCST meteorological data on its web site or publicize its availability on disk.

4. The factors and approaches to determine the maximum ambient concentration (Max_{Conc}) are very conservative and yield results well below expected actual ambient concentrations. In addition, the proposed treatment of "intermittent emissions" is inappropriate as truly intermittent emissions could be below 10 percent of the maximum hourly rate. As the focus is on chronic effects which correlate better to annualized emissions, annualizing intermittent emissions should be used regardless of how much lower they may be to the single hour's maximum rate.

5. The District's response to informal comments regarding the origin of values and methodology for Tables 1 and 2 is inadequate. The District refers to Attachment 1 of the PRIA. This attachment describes the Michigan rule, which is different from the District's proposed rule. Please provide a more complete response. For example, the District has not provided an adequate explanation of how the method relates to human health risk, or why the tables for building and stack height factors based on use of SCREEN3 are reasonable.

6. Section 2 - The equations in Section 2 assume there are allowable emissions with which to calculate maximum concentrations. This is not the case for a large number of emission points regulated by MACT technology standards and LDAR. Further, many, if not most, of the present regulations do not contain a set allowable emissions rate for emission points, as they are technology based standards, or a floating allowable emissions rates based on through puts.

7. Throughout Section 3, the District refers to "influential building" and "influential building height." These terms need to be defined in this regulation.

8. This regulation should be amended to provide for an adjustment factor for fugitive emissions when modeling under Tiers 3 or 4, since those models do not accurately model fugitive emissions.

9. Specific modeling protocols in addition to Appendix W are needed to provide guidance for modeling.

N. REGULATION 5.23 – CATEGORIES OF TOXIC AIR CONTAMINANTS

1. Eighteen chemicals of concern were identified in the West Jefferson County Risk Assessment and the need to address those findings was the stated basis for developing STAR. The expansion of the list to 190 or more compounds is not justified by the data on which the District relies. In fact, many of the additional compounds were analyzed for in the WLATS and found to be below the risk goal of one in a million. The chemicals for which there is not demonstrated risk should be removed from the program.

2. The proposed regulation exempts emissions of clean gaseous fuels from the definition of a TAC in Section 5. This exemption should be expanded tin include emissions from the combustion of these fuels. This will eliminate the need to calculate emissions and perform modeling for operations that are not true concerns.

3. The manner in which chromium is addressed in the STAR Program should be clarified. Total chromium should be speciated into hexavalent and trivalent chromium. Since hexavalent chromium is the more toxic species, it should remain a Category 1 TAC. Trivalent chromium should be included as a Category 4 TAC.

4. The proposed regulations do not reflect certain chemical and toxicological facts. The lists of regulated chemicals include many entries covering all of the compounds in a chemical family. There are many compounds that belong to more than one regulated chemical family. A single example includes the cyanates and thiocyanates of various metals (mercury, nickel, lead, cobalt, etc.). These compounds belong to both the category of cyanide and cyanide compounds on the proposed Category 3 list and to the respective categories defined by the parent metal and its compounds which are on the other lists. The regulations do not clearly address how to handle these multi-category compounds.

5. In addition, the toxicological properties of compounds vary greatly among the members of each chemical family. There is no recognition of these differences. Instead, the regulations would arbitrarily declare all of the members of a particular family to be equally toxic.

6. The inclusion of Category 2 chemicals based on TRI reporting is inappropriate. The mere fact that emissions of a chemical are reported via the TRI does not call for expanded regulation.

O. REGULATION 5.30 – REPORT AND PLAN OF ACTION FOR IDENTIFIED SOURCE SECTORS

LCP fully embraces the concept of evaluating and addressing the risk to human health and welfare from minor stationary sources, area sources, non-road mobile sources and mobile sources. This assessment should be completed prior to implementation of any of the additional proposed STAR regulations. This will provide for appropriately directed, cost effective reduction of toxic chemicals and a true reduction in the risk to public health.

III. RESPONSE TO DISTRICT'S PRELIMINARY REGULATORY IMPACT ASSESSMENT

1. In the beginning of the PRIA, the District cites EPA reports and studies that it asserts support the need for increased regulation of toxic air emissions. It also claims that the federal program for control of TACs will be insufficient to deal with the Jefferson County problems chronicled in the various reports. In discussing the federal program, the District points to the fact that the EPA residual risk program allows a range of risk from 1 to 100 in a 1,000,000 as a reason for implementing the STAR Program. The District disregards the analysis of the Kentucky Air Toxics Workgroup, which noted that a 1 in a 1,000,000 cancer risk may be a screening value but is not a standard. See Attachment 1 and comments above. The District also fails to address the September 2004 Metro Louisville Health Department study that addresses health issues in the community, including a high incidence of lung cancer from smoking and a breakdown of the causes of death in this community. The report does not attribute any cancer deaths to emissions of TACs.

   In fact, if the September 2002 Region 4 Relative Risk Screening Analysis is carefully reviewed it does not support the broad conclusions asserted by members of the media, and apparently adopted by District staff, that emissions of toxic air contaminants from industrial sources are the "problem" in the county's

placement at the top of the list for the southeast. As discussed in Attachment 1 to these comments, Jefferson County's rate of cancer incidence was 22nd in the region; its rate of respiratory deaths is 230th, and its rate of cardiovascular deaths is 525th in the region.

2. Regulation 1.02 - The District notes that it has identified five organic compounds that EPA, on November 29, 2004, exempted from the definition of "volatile organic compound." There does not appear to be any rationale or justifications for the inclusion of these compounds or assessment of the increase costs associated with that determination.

3. Regulation 1.06 - The District states that total plant-wide emissions, broken down into stack and fugitive emissions, are required by EPA to be reported for all TRI chemicals which include all the Category II and many of the Category I TACs. Because of the *de minimis* levels set in the TRI, many of the TACs LCP members use are not reported and tracking systems are not in place for these chemicals. This substantial burden is not adequately evaluated.

4. Regulation 1.07 - The District's comment states that the current regulation, providing an exemption for violations that are reported, is inconsistent with EPA policy memoranda dated September 28, 1982, February 15, 1983, and September 20, 1999. Although the District asserts that EPA "policy memos" require this change, EPA has taken no official action to disapprove the SIP on this basis. The District has not addressed the regulatory impact of this change.

5. Regulation 5.21 - In the PRIA, the District quotes Clean Air Act, Section 112(k)(3)(C), where the Act states that the goal is to reduce the incidents of cancer attributed to the emissions of stationary sources by not less than 75%. Section 112(k) is specifically focused on area sources. Thus, it would appear that the District's duty, if it has one under the Clean Air Act, to reduce emissions is as great with respect to area sources as it is with respect to larger sources. The area sources will not be considered before 2006 based on proposed Regulation 5.30.

6. Regulation 5.21 - The District goes to great length to justify the 1-in-one million risk goal, noting that the state has "begun implementing a risk-based review within the construction permit process, establishing a standard of 1×10^{-6} increased risk of cancer as meeting the provision of 401 KAR 63:020. *See, e.g.,* PRIA, at 2. As pointed out in the comments above, this is incorrect. DAQ has not promulgated such a standard and cannot regulate by policy

and guidance without violating KRS 13A. The PRIA is incorrect and does not properly assess the impacts of the choice of a 1 in a million cancer risk goal. Additionally, while the District discusses the basis for its proposal, it never states, nor addresses whether the proposed regulations are feasible.

7. Regulation 5.23 - The District lists the basis for each of the four categories of regulated TACs. The statement concludes that 48 of the 54 Category I, II, and III TACs are regulated under Section 112 of the Clean Air Act as a HAP or as an urban air toxic. There is no basis for regulation of the other six and no comparison to other programs. As noted in the earlier comments, the data relied upon to support establishment of the program identified 18 constituents of concern. The District has not adequately assessed the cost of expanding the program. Additionally, to the extent the District relies on the EPA study of elevated risk in Jefferson County as support for identification of the Category II TACs, the District has failed to take into account the weighting of the data. It appears that the most significant contributions to Jefferson County's high ranking are not air toxic emissions from large stationary sources. See Attachment 1 and the comments above.

8. Based on a review of the District's "comparison with any minimum or uniform standards," it appears that the District has done a very perfunctory job of meeting its obligation. The descriptions in this section are very general rehashes of the regulation with little, or no, real comparison with other state or local programs.

9. In the next section, the District discusses the Feasibility of Alternatives. The District, in most cases in one paragraph, provides a short basis for the proposals it has made for each regulation. In many instances, these are merely rehashes of discussion from the previous sections. There are no instances where the District compares what it has selected to some other choice it may have had. It frequently cites only governmental studies or reports to justify its conclusions. As an example, in Regulation 1.21, which requires the more stringent LDAR requirements, the PRIA cites a study by the Texas air quality agency which adopted more stringent LDAR requirements. Much of the Texas program, resulting from this study, is less stringent than the proposed STAR program. Following that citation, the PRIA states that, "The provisions were made as stringent as believed to be reasonable." Compared to what? LCP members believe the requirements are clearly "unreasonable." There is no citation to any industry discussions or reports that would indicate that any of the adopted provisions are "feasible."

10. District staff have indicated that the District reviewed every air toxic regulatory program in the country before developing the STAR proposal. Reportedly the staff relied heavily on Michigan, California, and Texas programs – consequently, they must also have rejected other programs. There is no explanation of how decisions to accept and reject programs were made. Therefore, the District has not fulfilled its obligation to give a reason "why an alternative was chosen or not chosen."

11. The District has not provided an adequate estimate of the costs and savings attributable to its proposal. Most of the cost estimates have come from governmental entities or reports and there are only occasional references to comments from consultants or industries, despite a significant number of comments during the informal public comment period.

    a. In Regulation 1.06, which requires emissions reporting, the District states that most TACs have already been reported by the Title V company so there will be no additional costs associated with Regulation 1.06. The District had been told many times prior to the issuance of this document that that is not the case. Because of the significant *de minimis* thresholds for reporting under the TRI Program, many insignificant, per the TRI Program, chemicals have never been tracked or reported. It will be a significant cost for industries to now go back and recapture this data.

    b. The requirement to model each emission point could cause significant expense for many of the companies impacted by this regulation.

    c. Ignoring previously expressed industry concerns, the District has estimated that the cost to implement the new requirements will be 0.1 to 0.3 Full-Time Equivalent ("FTE").

    d. In Regulation 1.21, the enhanced LDAR Program, the District estimates that for those already under the federal LDAR Program, costs will increase an additional 25%. There is no dollar value associated with this estimate. For three other companies that would be affected by the program that have not previously been regulated through the federal program, the District estimates that one company will need to hire one new employee and the remaining two companies would each need to hire two employees. The regulation also requires a third-party audit every two years, which the District estimates to cost

between $5,000 and $20,000 per audit. As set out below, these cost assumptions are not accurate and no specific authorities are cited in support of these assumptions.

e. In its discussion of Regulation 5.21, the District makes estimates of the number of Group I stationary sources that will have emissions exceeding an Environmental Acceptable level ("EA") for at least one TAC. The District further estimates that of the 130 Group II stationary sources, 1/3 may have the potential for exceeding an EA level. The District then makes some assumptions as to how much modeling will be performed, downplaying the extent that may reasonably be expected. The District concludes that for a "typical environmental acceptability determination," three hours of time would be needed by an experienced modeler for the screening models and 10 to 12 hours to perform the full modeling through Tier 3 and Tier 4. The District notes that these estimates have been provided by state air pollution control agencies and further states that "consultants have indicated that the time for modeling is significant longer." There is no dollar estimate provided anywhere related to this cost.

12. Following that discussion, the District addresses the costs that may be incurred to reduce TAC emissions to an EA level.

a. The District has developed very general cost estimates for certain categories of control technologies. They have categories based on the cost per ton ranging from $5,000 per ton to $10,000 to $20,000 per ton. In the $10,000 to $20,000 per ton category, the District cites the Bay area air quality management district as using a $17,500 number as the upper cost-effectiveness end of required VOC controls. The PRIA then cites New York and New Jersey as programs that do not consider cost-effectiveness in setting acceptable risk levels. As discussed in more detail below these costs are not accurate. The District also fails to take into account the low level of emission reduction that the STAR program would in fact achieve.

b. The District then estimates that of the companies that have emissions that are found to be environmentally unacceptable, "more than half could employ pollution prevention measures, reformulations, relatively inexpensive equipment changes, or very cost-effective control equipment, i.e., measures with the cost-effectiveness of less than $5,000 per ton, to comply with the draft

requirements." The District cites reports from Wisconsin, Oregon and Vermont as supporting their costs conclusions. The District does not adequately assess the ability of companies to resolve issues with reformulations or the time it takes to develop such alternatives and the risk of quality problems that occurs. The control equipment estimates are not accurate.

c. District Regulation 7.2.1.3 requires the District to assess the "estimated capital and operating costs and savings associated with compliance with the proposed action for affected facilities." At no point in the PRIA does the District discuss the potential cost savings from any of the possible control strategies or technologies at an affected facility.

13. KRS 77.185(2)(e) requires the District to assess the impact of its regulatory proposals. The assessment must include the estimated costs and savings associated with the action and the feasibility of all alternatives considered. The PRIA does not satisfy this statutory requirement or the District's regulations. Among other deficiencies, the costs associated with the implementation of the STAR program are far in excess of those estimated by the District. The following examples are illustrative of this point.

a. DuPont Dow Elastomers estimates that its lowest cost for emission reductions under the STAR proposal will be $35,000 per ton. That cost is estimated to increase to $150,000 per ton for incremental reductions in emissions of TACs under STAR.

b. Rohm & Haas estimates that the increased LDAR requirements will result in a potential fugitive emission reduction of 500 pounds per year at an annual cost of $200,000, which is the equivalent of $800,000/ton of emissions reduced. In order to reduce emissions from point sources, Rohm & Haas anticipates that it would have to install add-on pollution controls, in the form of a thermal oxidizer. Comparing the capital cost of a thermal oxidizer to the amount of TAC emissions reduction, the cost of reduction is estimated to be $500,000/ton.

c. As written, the proposed STAR regulations would require the Zeon Chemicals – Kentucky Plant to reduce emissions of acrylonitrile (AN) and 1,3-butadiene (BD) by an additional 97%. This reduction is in addition to the 71% reduction in emissions of these two chemicals since Zeon

took ownership of this facility in 1989. Using an EPA estimating tool, possible control technologies were explored for their associated costs on two of the plant's six main finishing lines. Of the three technologies worthy of further consideration, i.e. catalytic incineration, regenerative oxidation and thermal oxidation, costs per ton per year of controlled AN and BD ranged from $94,000 to $775,000 on one line and $271,000 to $1,610,000 on the other line. (These costs per ton include amortized capital costs and annual operating costs.) Multiplying by the controlled tons per year for each of these lines yields total costs of $790,000 to $6,400,000 per year for one line and $530,000 to $3,100,000 per year for the other line.

d. The PRIA suggests the regulated community will need to add 5 Full Time Equivalents [FTE] to come into compliance with the HON portion of the program. At current industry rates for appropriately qualified employees, this is an estimated cost of $475,000 per year, including benefits. It is anticipated that four of the five FTEs would be at facilities with continuously monitored emissions, which means these facilities identify leaks at the time of occurrence. Consequently, they have very low quantities of fugitive emissions, significantly less than a ton. For these two affected facilities, the cost to implement Regulation 1.21 is approximately $40,000,000 to $440,000,000 per ton. It is presented on a $/ton basis for comparison with alternative methods of emission reduction. (See Attachment 2 for the calculations.) The District has failed to estimate a cost per ton for emissions reductions resulting from this proposed regulation. Therefore, the District has not evaluated the benefit of reducing emissions against the cost of implementation to justify the program. The exorbitant cost of LDAR implementation does not justify the miniscule emission reduction. (See Attachment 3)

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Attachment 2 Louisville Chemistry Partnership, Inc. Comments

Technical LDAR Issues
Regulation 1.21

Emission Reduction Costs

Example 1:

- ★ Company 1 estimates the proposed LDAR program will have no emission reduction effect, since they already manage their program with similar leak detection objectives. Since it is not possible to divide by zero, assume 1 lb of emissions reductions will be achieved.
- ★ The estimated cost for Company 1 to add 2 appropriately qualified Full Time Equivalents to come into compliance with the HON portion of the program is $200,000.
- ★ The estimate for the audit program is $20,000.
- ★ The cost of monitoring equipment purchase and maintenance has not been included, nor has the cost of any data management system.
- ★ Therefore:

$$\frac{\$200,000+\$20,000}{1lb}*\frac{2000lb}{ton}=\$440,000,000/ton$$

Example 2:

- ★ Company 2 estimates the proposed LDAR program will have minimal emission reduction effect, since they already manage their program with similar leak detection objectives. Assume 10 lb of emissions reductions will be achieved.
- ★ The estimated cost for Company 2 to add 2 appropriately qualified Full Time Equivalents to come into compliance with the HON portion of the program is $180,000.
- ★ The estimate for the audit program is $20,000.
- ★ The cost of monitoring equipment purchase and maintenance has not been included, nor has the cost of any data management system.
- ★ Therefore:

$$\frac{\$180,000+\$20,000}{10lb}*\frac{2000lb}{ton}=\$40,000,000/ton$$

Attachment 3 to Louisville Chemistry Partnership, Inc. Comments

Sample Comparison of HON and STAR Leak Definitions for Representative Facility

	Light Liquid Valves		Gas Valves		Light Liquid Pumps		Compressors/Agitators		Gas/Light Liquid Connectors		TOTAL	
HON Phase III Leak Definition	500	ppm	500	ppm	1000	ppm	10000	ppm	500	ppm		
	0.00091	kg/hr	0.00042	kg/hr	0.00563	kg/hr	0.01058	kg/hr	0.00075	kg/hr		
	3.607	lb/yr	1.687	lb/yr	22.383	lb/yr	42.022	lb/yr	2.965	lb/yr	**72.66**	**lb/yr**
STAR Leak Definition	100	ppm	100	ppm	250	ppm	2500	ppm	500	ppm		
	0.00025	kg/hr	0.00010	kg/hr	0.00180	kg/hr	0.00310	kg/hr	0.00075	kg/hr		
	1.00	lb/yr	0.41	lb/yr	7.14	lb/yr	12.32	lb/yr	2.97	lb/yr	**23.84**	**lb/yr**
Leak Rate/yr/comp for 8760 hrs	2.61E+00	lb/yr	1.27E+00	lb/yr	1.52E+01	lb/yr	2.97E+01	lb/yr	0.00E+00	lb/yr		
# components	500		500		10		10					
% leaking	0.5%		0.5%		10.0%		10.0%					
Annual Δ Emissions	6.52	lb/yr	3.18	lb/yr	15.24	lb/yr	29.70	lb/yr	0.00	lb/yr	**54.64**	**lb/yr**
Annual Δ Emissions	0.003	tpy	0.002	tpy	0.008	tpy	0.015	tpy	0.000	tpy	**0.027**	**tpy**

Ref: "Protocol for Equipment Leak Emission Estimates" (Publication EPA-453/R-95-017), Table 2-9, SOCMI LEAK RATE/SCREENING VALUE CORRELATIONS